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EXAMINER
SMITH, CAROLYN L

ART UNIT	PAPER NUMBER
1631	18

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/873,367	YOUNG ET AL.	
	Examiner	Art Unit	
	Carolyn L Smith	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/3/03, 3/14/03, and 4/29/03* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43 and 45-52* is/are pending in the application.

4a) Of the above claim(s) *6-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 45-52* is/are rejected.

7)☒ Claim(s) *5 and 51* is/are objected to.

8)☒ Claim(s) *1-43 and 45-52* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6,16* .
4) ☒ Interview Summary (PTO-413) Paper No(s). *9* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet* .

Continuation of Attachment(s) 6). Other: Sequence Match Listing (14 pages).

DETAILED ACTION

Applicants' election with traverse of Group I (claims 1-5 and 44-49); sequence elections of SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051; the first amendment of claim 1; and addition of new claim 50 in Paper No. 11, filed 2/3/03, are acknowledged. Applicants' cancellation of claim 44, second amendment of claim 1, and addition of new claims 51 and 52 in Paper No. 14, filed 3/14/03, are acknowledged. Claims 6-43 are withdrawn from consideration as being drawn to non-elected Groups.

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

In Paper No. 14, filed 3/14/03, misnumbered claim 50 has been renumbered 51.As agreed upon in a telephone interview on 11/25/02, Applicants were allowed to elect up to 10 sequences for the sequence election requirement.

Applicants' traversal is on the grounds that Groups I and IV should be combined as the claims are limited to the use of compounds having activity in the screening claims.

The applicants' request to combine Groups I and IV into one invention was found unpersuasive because of the following reasons (summarized from the restriction paper):

As summarized on page 6, first paragraph, of the Restriction Paper, mailed 9/26/02, Groups I and IV are directed to a process and method that comprise different means and produce different results/goals. Group I screens compounds and agents which is different from the results of Group IV. Group IV treats cancer which is a process not found in the Group I. These distinct processes and methods are often separately characterized and published in literature and would add undue search burden if they were examined together. Thus, they are considered distinct invention types for restriction purposes.

The requirements are still deemed proper and are therefore made FINAL.

Claims herein under examination are 1 (twice amended), 2-5 (original), 45-49 (original), 50 (new), 51 (new), and 52 (new).

Claim Objections

Claim 51 is objected to due to the inclusion of subject matter which has been non-elected due to a restriction requirement and therefore withdrawn from consideration. The non-elected subject matter in claim 51 is summarized as follows: Claim 51 contains sequences, such as sequences other than SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051, which are non-elected subject matter. Removal of non-elected subject matter is requested.

Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 5 recites the phrase "signature gene set" which does not

seem to further limit claim 1. On page 5 (lines 16-25) of the specification, "signature gene set" is defined as sets of genes whose expression is linked to or characterized in order to define the cancerous or non-cancerous status of cells or tissues. With this definition of "signature gene set", it appears that all genes in claim 1 belong to such a set making it unclear how claim 5 further limits claim 1. Claim 5 also does not appear to be further limiting due to being reasonably interpreted as broadening the gene set as compared to claim 1. Broadening is not a further limiting issue when a dependent claim is compared to a claim from which it depends. The broadening issue in the specification of page 5, lines 16-20, indicates that a signature gene set is inclusive of genes which are merely "linked to" a cancerous or non-cancerous status. Such a linkage may be reasonably interpreted as being due to a variety of biochemical pathway linkages. For example, a cancerous state may increase the production of some cellular metabolite which is deleterious to the cell via an overexpressed gene, but that a linked gene expression product may have normal expression but be in the pathway of said deleterious gene product processing in the cell. Thus, the linkage description in the specification of page 5, lines 16-20, broadens the genes being determined compared to those in claim 1 to include peripheral gene determination which are linked via biochemical pathway linkage to an overexpression gene but itself not be overexpressed.

Claim Rejections – 35 U.S.C. 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

LACK OF WRITTEN DESCRIPTION

Claims 1-5 and 45-52 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time of the invention was filed, had possession of the claimed invention.

The specification discloses SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051 which correspond to nucleic acid sequences. SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051 and their full complements meet the written description provisions of 35 U.S.C. 112, first paragraph. However, due to the open claim language of "comprising a nucleotide sequence corresponding to a gene" in claims 1 and 52, these claims encompass sequences which do not meet the written description provision of 35 U.S.C. 112, first paragraph. The specification provides insufficient written description to support the genus encompassed by these claims.

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention.* The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed.*" (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.)

With the exception of SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051, the skilled artisan cannot envision the detailed chemical structure of the encompassed

polynucleotides and/or proteins, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it. The nucleic acid itself is required. See Fiers v. Revel, 25 USPQ2d 1601, 1606 (CAFC 1993) and Amgen Inc. V. Chugai Pharmacentical Co. Ltd., 18 USPQ2d 1016. In Fiddes v. Baird, 30 USPQ2d 1481, 1483, claims directed to mammalian FGF's were found unpatentable due to lack of written description for the broad class. The specification provided only the bovine sequence.

Finally, University of California v. Eli Lilly and Co., 43 USPQ2d 1398, 1404, 1405 held that:

...To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc.* , 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); *In re Gosteli* , 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (" [T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." *Lockwood* , 107 F.3d at 1572, 41 USPQ2d at 1966.

Therefore, only SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051 and their full length complements, but not the full breadth of the claims meet the written description provision of 35 USC 112, first paragraph. The species specifically disclosed are not representative of the genus because the genus is highly variant. Applicant is reminded that Vas-Cath makes clear that the written description provision of 35 USC 112 is severable from its enablement provision. (See page 1115.)

Claims Rejected Under 35 U.S.C. § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 and 45-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Claims 1 (lines 3-4) and 52 (lines 3-4) recite the phrase "a polynucleotide *comprising* a nucleotide sequence corresponding to a gene" which is vague and indefinite. Due to the open claim language of "comprising", it is unclear if "a polynucleotide" includes the full-length sequence of a particular sequence or just a fragment of a particular sequence. For example, a hybridization probe which is a fragment may be considered to correspond to a gene via the usage of such a probe for detection. Clarification of the metes and bounds of the instant claims is required. Claims 2-5, 50, and 51 are also rejected due to their dependency from claim 1.

Claims 1 (line 4) and 52 (line 4) recite the term "corresponding" which is vague and indefinite. It is unclear what criteria and to what extent the sequence must be similar to a gene to be considered "corresponding". For example, a nucleotide sequence corresponding to a gene could be the full-length nucleotide sequence of that gene. Another interpretation is that the nucleotide sequence may include a sequence similar to the gene but with modifications made at various nucleotides and several other scenarios. Clarification of the metes and bounds of the instant claims is required. Claims 2-5, 50, and 51 are also rejected due to their dependency from claim 1.

Claims 1 and 52 recite the terms "increased" (line 5 of both claims; line 11 of claim 1; and line 14 of claim 52), "elevated" (line 6 of both claims; line 10 of claim 1; and line 12 of claim 52), "increase" (line 9 of claim 1 and line 11 of claim 52), "decrease" (line 11 of claim 1 and line 13 of claim 52) which are vague and indefinite. It is unclear what threshold Applicants

intend to use for determining if expression is significantly increased, elevated, or decreased as it is well known that while scientific data may be different, it may not be significantly different if variations are caused by fluctuations including experimental processing or measurement error. Clarification of the metes and bounds of these terms is requested. Claims 2-5, 50, and 51 are also rejected due to their dependency from claim 1.

Claims 1 and 52 recite the phrases "cancerous cell over that in a non-cancerous cell" (claim 1 [lines 5 and 12] and claim 52 [lines 5 and 14]) and "non-cancerous cell over that in a cancerous cell" (claim 1 [lines 6 and 10] and claim 52 [lines 6 and 12]) which is vague and indefinite. Besides their cancerous status, it is unclear in what aspects these cells are related, such as if these cells are from the same or different type of organ tissue as well as the same or different type of organism which would aid in determining test relevancy. Clarification of the metes and bounds of these phrases is requested. Claims 2-5, 50, and 51 are also rejected due to their dependency from claim 1.

Claims 1 (lines 6-7) and 52 (lines 6-7) recite the phrase "under conditions" which is vague and indefinite. It is unclear how these particular conditions are defined as they may currently be in the presence or absence of modulating compounds. Clarification of the metes and bounds of these terms is requested. Claims 2-5, 50, and 51 are also rejected due to their dependency from claim 1.

Claims 45-49 are indefinite as they include reference to a cancelled claim. The renumbering of claims as set forth in Paper No. 8, mailed 9/26/02, caused claim 45 to depend from claim 44, which has been canceled. Correction is suggested by amending the claims to properly depend from an elected claim.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. (e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 45-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (P/N 6,232,065) in view of GenBank (various Accession numbers), Schelegel et al. (WO 01/60860), Einat et al. (WO 00/12525), and Kinzler et al. (P/N 5,702,903).

Robinson et al. describe methods and compositions for screening factors that affect the expression patterns of individual genes or groups of genes in various disease states such as from normal, colon cancer, and other metastatic tissue samples (col. 1, lines 4-10; col. 12, lines 17-44; and col. 23, lines 12-38). Robinson et al. describe studying the effects of exogenously added compounds (col. 22, lines 59-62) on thousands of genes including multiple genes from specific gene families (col. 13, lines 1-22) which is reasonably interpreted as a signature gene set as

stated in claims 2-5. Robinson et al. describe comparing metastatic cancer tissue with non-metastatic cancer tissue to identify differentially expressed genes as markers of metastatic potential (col. 16, lines 19-22). The presence or absence of these markers can then be assessed in various clinical cancer isolates (col. 16, lines 22-24). Robinson et al. describe anti-cancer compounds (col. 16, line 31) and drug screening to look for compounds to alter genes known to be implicated in a disease state, such as gene over-expression or under-expression in cancer cells as opposed to normal cells (col. 16, lines 48-57) as stated in claim 1. Robinson et al. provide an assaying example such that if a gene family member is known to be overexpressed in cancer cells (compared to normal cells), then one can look for drugs that reduce the expression of the suspect gene to normal levels (col. 16, lines 52-57). Robinson et al. describe variations of such comparisons are included in their invention (col. 16, lines 58-60). Robinson et al. describe examining an entire gene family expression profile and identifying important marker genes that can be used in future experiments to identify cancer and other cancer-related testing (col. 17, lines 4-19). Robinson et al. describe providing results for gene expression levels as stated in claim 52. Robinson et al. describe results being presented in a comparative format including high expression in most samples, low expression in most samples, and expression limited to only a few cell types in the panel (col. 20, lines 48-58) which exemplifies various degrees of expression as stated in claim 50. Robinson et al. describe many of the multiple genes showing expression changes in a particular tyrosine kinase gene family set (col. 21, lines 9-27 and col. 23, lines 12-38) as mentioned in claims 47-49. Robinson et al. describe using an assortment of tissues from various organs (Table 1). Robinson et al. do not describe the elected genes being assayed exhibit expression which differ between a cancerous versus non-cancerous cell.

Robinson et al. do not describe particular sequences (SEQ ID NO: 16, 87, 453, 462, 468, 651, 865, 1015, 1027, and 1051) that are elected in the instant invention.

Kinzler et al. describe measuring a gene product that is elevated over that which is normally produced by non-cancerous cells (col. 5, lines 51-54). Kinzler et al. describe these elevated expressions may be present in various tumors such as from lung, colorectal, and stomach (col. 5, lines 55-60). Kinzler et al. describe using non-cancerous cells for determining baseline expression levels (col. 5, lines 60-67). Kinzler et al. describe methods and kits for detecting elevated expression and identifying compounds which interfere with gene products (col. 3, lines 19-24).

Due to the open claim language of "a polynucleotide comprising a nucleotide sequence corresponding to a gene", a prior art polynucleotide need not be 100% identical, although most of those described below are an exact match. GenBank describes a sequence (Accession Number AA142913) which is 100% identical to SEQ ID NO: 16 of the instant invention. GenBank describes a sequence (Accession Number D13626) which is 100% identical to SEQ ID NO: 87 of the instant invention. GenBank describes a sequence from colon tissue (Accession Number AW006758) which is 100% identical to SEQ ID NO: 453 of the instant invention. Schlegel et al. describe a marker sequence in prostate cancer (ABV29346) which is 100% identical to SEQ ID NO: 462 of the instant invention. GenBank describes a sequence from colon cancer tissue (Accession Number AI368176) which is 100% identical to SEQ ID NO: 462 of the instant invention. GenBank describes a sequence from lung cancer tissue (Accession Number AA629913) which is 96.5% identical to SEQ ID NO: 468 of the instant invention. GenBank describe a sequence from liver tissue (Accession Number D00408) which is 100% identical to

SEQ ID NO: 651 of the instant invention. GenBank describes a sequence from a colon tumor (Accession Number AW967166) which is 92.3% identical to SEQ ID NO: 865 of the instant invention. GenBank describes a sequence from normal fetal cochlea (Accession Number N22479) which is 100% identical to SEQ ID NO: 1015 of the instant invention. GenBank describes a sequence from senescent fibroblast (Accession Number N98464) which is 100% identical to SEQ ID NO: 1027 of the instant invention. Einat et al. describe a sequence from a hypoxia response gene (AAZ51562) which is 97.5% identical to SEQ ID NO: 1027 of the instant invention. GenBank describes a sequence from the liver/spleen (Accession Number W90146) which is 99.7% identical to SEQ ID NO: 1051 of the instant invention.

Schlegel et al. describe identifying novel markers which are differentially expressed in cancer cells compared to normal cells (page 13, last paragraph), including ABV29346 (page 15, last paragraph) which matches SEQ ID NO: 462 of the instant invention. Schlegel et al. describe comparing the level of expression of a marker (including ABV29346 in Tables 1-9) in a patient sample with normal level of expression of a marker in a control (page 3, third paragraph). Schlegel et al. describe using samples of cells obtained from various tissues and fluids (page 3, fourth paragraph). Schlegel et al. describe using a plurality of markers and comparing samples against normal controls to determine if significantly altered expression levels exist in the markers (page 5, first full paragraph). Schlegel et al. describe a method for determining whether the cancer has metastasized (page 6, last paragraph). Schlegel et al. describe selecting compositions for inhibiting cancer via cell contact, expression comparison, and selecting compounds which alter expression levels of markers (page 7, lines 4-13).

Einat et al. describe genes which are differentially expressed in hypoxia which plays a role in tumors (page 1, first and third paragraph). Einat et al. describe identifying hypoxia-regulated genes [including SEQ ID NO: 7 (AAZ51562) which is 97.5% similar to SEQ ID NO: 1027 in the instant invention] which can be used as target genes for treating pathologies associated with tumor growth (page 2, second and third paragraph). Einat et al. describe performing analysis on genes identified by differential expression responses in normal and pathological tissue using microarray hybridization (page 34, lines 12-20). Einat et al. describe SEQ ID NO : 7 as showing up-regulated expression after 16 hours of hypoxia (page 46, fourth paragraph).

Robinson et al. state their invention provides a means to generate and monitor gene expression profiles resulting from cellular and physiological changes that can then be characterized for individual genes or groups of genes (col. 1, lines 4-10). Robinson et al. state their invention may be used to screen drug compounds that affect biological samples (col. 16, lines 48-52). Robinson et al. state that human cancer is a result of genetic changes that result in alterations in the profile of expressed genes (col. 1, lines 30-33). Robinson et al. note the importance of methods that can measure the expression levels of thousands of genes to monitor the progression of cancer (col. 1, lines 33-39). Robinson et al. state their invention may be used to compare normal and cancerous tissue as well as to differentiate between cancerous tissue that is metastatic and non-metastatic (col. 15, lines 61-67). Robinson et al. describe using tissues from various types of organs as seen in Table 1. Robinson et al. state that various modifications and variations can be made to their invention (col. 30, lines 13-18). Schlegel et al. (pages 13 and 15) and Einat et al. (pages 1 and 2) describe two sequences with similarity to two sequences in

the instant invention that are known to be differentially expressed in cancerous or pathological cells versus normal cells. A person of ordinary skill in the art would have been motivated to combine other sequences, including gene sequences already known to be differentially expressed in cancer versus non-cancerous cells (such as those stated by Schlegel et al. and Einat et al.), from various parts of the body to the screening process presented by Robinson et al. and to compare them with known non-cancerous controls as stated by Kinzler et al. to check for the presence of gene expression alterations involved in normal and cancerous tissue. Therefore, a person having ordinary skill in the art at the time the invention was made would have reasonably expected success of finding compounds that alter differential expression between cancerous and non-cancerous cells of the various sequences described in the paragraph above (such as those stated by Schlegel et al. and Einat et al.) which come from various parts of the body, as some of these sequences are already known to be differentially expressed in the cancerous and non-cancerous cells which would allow scientists to identify which compounds are effective in controlling expression and where in the body this control takes place, as stated by Robinson (col. 16, lines 48-57 and col. 22, lines 1-9 and 59-62).

Thus, Robinson et al., in view of GenBank (various Accession numbers), Schlegel et al., and Einat et al., and Kinzler et al., motivate claims 1-5 and 45-52.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located

in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (703) 308-6043. The examiner can normally be reached Monday through Friday from 8 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

July 10, 2003

ARDIN H. MARSCHEL
PRIMARY EXAMINER